CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-01/533i/Cube/2017-18 02.02.2018

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager,** KRIDL, Bangalore.
* Name of the work	:	Improvements to CC Roads and RCC drains Dhobighat surrounding area in PK's colony slum Mallasandra Ward No.13, BBMP, Bangalore.
* Reference	:	BBMP/EE/PD/WO/64/2017-18 Dated: 14.11.2017
* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	02.02.2018

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	05.01.2018	02.02.2018	8.139	474.5	21.09
2	05.01.2018	02.02.2018	8.266	510.3	22.68
3	05.01.2018	02.02.2018	8.379	522.1	23.20

*Information is furnished by the Customer/Representative.

Note:

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⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

****

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Technical Manager

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Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

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* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	05.02.2018

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	08.01.2018	05.02.2018	8.109	480.7	21.36
2	08.01.2018	05.02.2018	8.229	510.3	22.68
3	08.01.2018	05.02.2018	8.330	522.8	23.24

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* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	05.02.2018

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	08.01.2018	05.02.2018	8.118	482.5	21.44
2	08.01.2018	05.02.2018	8.299	506.6	22.52
3	08.01.2018	05.02.2018	8.370	516.3	22.95

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T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-01/533i/Pre Slab/2017-18 17.01.2018

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CORE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager,** KRIDL, Bangalore.
* Name of work	:	Improvements to CC Roads and RCC drains Dhobighat surrounding area in PK's colony slum Mallasandra Ward No.13, BBMP, Bangalore.
* Reference	:	BBMP/EE/PD/WO/64/2017-18 Dated: 14.11.2017
* Sample ID	:	Precast slab
* Grade of Concrete	:	M_{20}
Technical Reference	:	IS:516-1959 (RA- 2013), SP-24:1983.
Sample Received on	:	12.01.2018
Date of Testing	:	17.01.2018

Sl. No	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	79.00	0.390	2514.25	1.58	0.955	29.85	15.20	16.42	17.20	21.50
2	50.00	81.00	0.399	2508.75	1.62	0.959	32.65	16.63	17.96	17.22	21.53
3	50.00	82.00	0.405	2515.42	1.64	0.961	33.90	17.27	18.65	17.92	22.40

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Job No.: CTCE/BBMP/KRIDL/W.No.13/GSB-II/GR/2017-18 20.01.2018

TEST REPORT ON GRADATION FOR COARSE GRADED GARNULAR SUB BASE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager,** KRIDL, Bangalore.
* Name of work	:	Improvements to CC Roads and RCC drains Dhobighat surrounding area in PK's colony slum Mallasandra Ward No.13, BBMP, Bangalore.
* Reference	:	BBMP/EE/PD/WO/64/2017-18 Dated: 14.11.2017
* Sample ID	:	Coarse Graded-II
Technical Reference	:	IS : 2720 (Part - 4) 1985 (RA-2010), MORTH Table : 400-02
Date of Testing	:	20.01.2018

Oven Dry Wt (gm) : 5000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specified Limits
53	-	-	-	100	100
26.5	2205	2205	44.10	55.90	50-80
4.75	1620	3825	76.50	23.50	15-35
0.075	780	4605	92.10	7.90	0-10
PAN	395				
Total	5000				

* Information is furnished by the Customer/Representative

Remarks: Satisfies MORTH Specifications as per Table 400-2, Grading II

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Job No.: CTCE/BBMP/KRIDL/W.No.13/GSB-1/AL/2017-18 Date 20.01.2018

TEST REPORT ON ATTERBERG LIMITS FOR GRANULAR SUB BASE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager,** KRIDL, Bangalore.
* Name of work	:	Improvements to CC Roads and RCC drains Dhobighat surrounding area in PK's colony slum Mallasandra Ward No.13, BBMP, Bangalore.
* Reference	:	BBMP/EE/PD/WO/64/2017-18 Dated: 14.11.2017
* Sample ID	:	GSB- (Coarse graded-I)
Technical Reference	:	IS : 2720 (Part - 5) 1985 (RA-2010), MORTH Table : 400-01
Date of Testing	:	20.01.2018

Sl. No.	Particulars	Test Results	Standards as per Specifications
1	Liquid Limit, %	22.50	25.0% Maximum.
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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